EDUCATION AND TRAINING

Parts Repair Ordering System

By
Patrick K. Hawkins
Lear Siegler Logistics International
and
Christine L. Hazlett
Parts Repair Ordering System II Program

> A pessimist sees the difficulty in every opportunity, an optimist sees the opportunity in every difficulty.
>
> Sir Winston Churchill (1874-1965)

What Is Parts Repair Ordering System II?

One of the missions of the Air Force Security Assistance Center (AFSAC) is to develop and execute international agreements and provide foreign military sales (FMS) customers support for both standard and non-standard items. Non-standard items are no longer actively managed by the Department of Defense (DoD), whether the source of supply is organic (e.g., depot) or contractor support (C-17 FLEX sustainment). A non-standard part may be obsolete and out of production, or it may be available from a small manufacturer with flexible manufacturing processes who has access to a particular build specification, or it may be available in the secondary market in a warehouse and available for sale, possibly with some retrofit or reconditioning. The Parts and Repair Ordering System (PROS II) is a government contract that is recognized by DoD as the government's source of supply for non-standard parts. Although the contract was originally developed to procure non-standard parts for Air Force components of our foreign military sales customers, PROS II was recently identified by Defense Security Cooperation Agency (DSCA) as the tri-services' preferred source of supply for non standard parts and repair.

The PROS II contract simulates all of the government's procurement activities required to provide logistic requirements support. PROS II provides allied customers the best value for part support for aging weapon systems and out-of-production/obsolete parts in support of their weapon systems. Through PROS II, AFSAC is committed to providing these requirements by focusing on timely support, competitive pricing, and quality program management.

Lear Siegler Logistics International (LSLI) manages the day-to-day operations of the PROS II contract under a five-year Indefinite Delivery Indefinite Quantity (IDIQ) contract. The contractual arrangement includes competitively derived fixed fees for all of the procurement service related to successfully filling a supply or maintenance requisition. The contract includes an award fee plan and semi-annual award fee periods throughout the life of the contract. Three different types of procurement services are available through PROS II.

Supply

If DoD no longer actively manages a part it is called non standard and it becomes a PROS II supply/repair part candidate. The majority of these supply/repair parts are part numbered requisitions and a national stock number (NSN) has never been assigned. The DoD source of

supply can also forward requisitions for standard supply/repair parts that cannot be supported in a timely manner to PROS II.

Maintenance

Repair and maintenance requisitions can also be filled where the US government no longer manages repairs for a particular asset. This includes items that are classified as consumables with expendability, recoverability repairability category (ERRC) code of N or P. US depots do not normally repair consumable items. Maintenance performed under the PROS II program is solely repair and return. The customer will receive the same asset they turn-in for repair. In some instances, when the item is beyond economical repair (BER) an exchange may be offered to the customer or the customer may submit a requisition to replace the item.

Task Orders

The most common question is, "What is a task order?" Task orders are the course of last resort for parts re-engineered. Task orders can also provide studies, analysis and technical services for the FMS customer. Task order support can include item management, purchasing, production and production management, financial management, computer technology, program management, equipment specialties, law, transportation, distribution, storage and storage management, quality assurance and/or engineering. As of this article twenty task orders have been implemented under the PROS II contract.

History of Parts Repair Ordering System II

Between 1989 through 1990, AFSAC recognized the need to provide sustained support to FMS customers for non-standard and hard to support standard items. Cancellation rates from DLA and the depots were less than optimal and lead times for delivery were so miserable that FMS customers were complaining loudly. In September 1990, AFSAC solicited and awarded the first non-standard support contract to Systems Control Technology (SCT) under the Non-Standard Item Parts and Repair System (NIPARS) contract. NIPARS is often referred to as the first generation (1991 through 1995) contract for non-standard parts support. The NIPARS program was a success, processing approximately 97,000 requisitions, valued at $455M. In 1995, AFSAC again solicited for the follow-on to NIPARS. The new program was called, Parts and Repair Ordering System (PROS I) which ran from 1996 through 2000. The PROS I contract was awarded to Science Applications International Corporation (SAIC) in 1996. PROS I generated over 173,000 requisitions with a material value over $1.1B. PROS II was competitively awarded in December 2000 to Lear Siegler Logistics International (LSLI).

The conceptual philosophy behind these NIPARS/PROS contractual models required a cultural readjustment by the entire acquisition community who sustained a belief that only the government, and the contracting officer, could contract for supplies and services at a fair and reasonable price. Acquisition was slowly evolving from the traditional adversarial relationship between the government and the prime contractor to a long term teaming arrangement. The current PROS II contract is based on a partnership that promotes achievement of mutually beneficial goals.

Parts Repair Ordering System II Capabilities

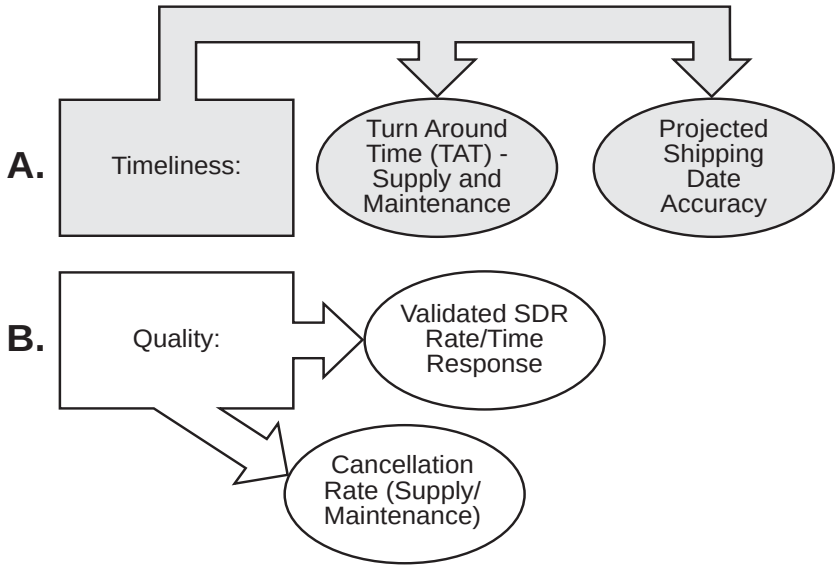
PROS II is the Air Force's solution to providing FMS support and repair long after the support of the weapons systems was eliminated from the United States inventory. In reality, by the time a requisition hits the PROS II level of support, the requisition is in danger of being cancelled.

Much of the success of the PROS II program is resident in the organizational structures that support the program, from both a government and contractor framework. The overall premise of the contract is designed to provide the customer with the right part, at the right time, and at the

right price. This is strictly speaking a performance based service contract with objective, measurable, and easily verifiable metrics which track to the Award Fee Plan.

The Air Force measures contractor performance both in timeliness of procurement actions and the quality of the material supplied to the customer. Timeliness is measured both in turn-around-time (TAT) and projected shipping date accuracy. In other words, how fast can the contractor provide the right part at the level of service and how accurate is the estimated shipping date. (Figure 1). The FMS customer has the option to select between three different levels of service (LOSs) for each supply and maintenance/repair requisition. The levels of service are defined in the contract with their required TAT. The LOS categories are not mission capable supply (NMCS), urgent and routine. For example, the LOS for a NMCS supply requisition is fifty-five days. Due to the nature of non-standard procurement support–items are not available off-the-shelf. The performance metric associated with this LOS is 50 percent of NMCS requisitions will be filled and delivered within fifty-five days of initiation.

Figure 1. Process Measurements



Estimated Shipping Date (ESD) accuracy is an objective metric in the PROS II contract, the contractor must ship the repair part or complete the maintenance action within thirty days of the estimated shipping date as quoted by the supplier or maintenance activity. Shipping date accuracy provides for some unique challenges. Since shipping date accuracy is critically important not only to the FMS customer but is equally important to the PROS II contractor to accurate state the estimated shipping date.

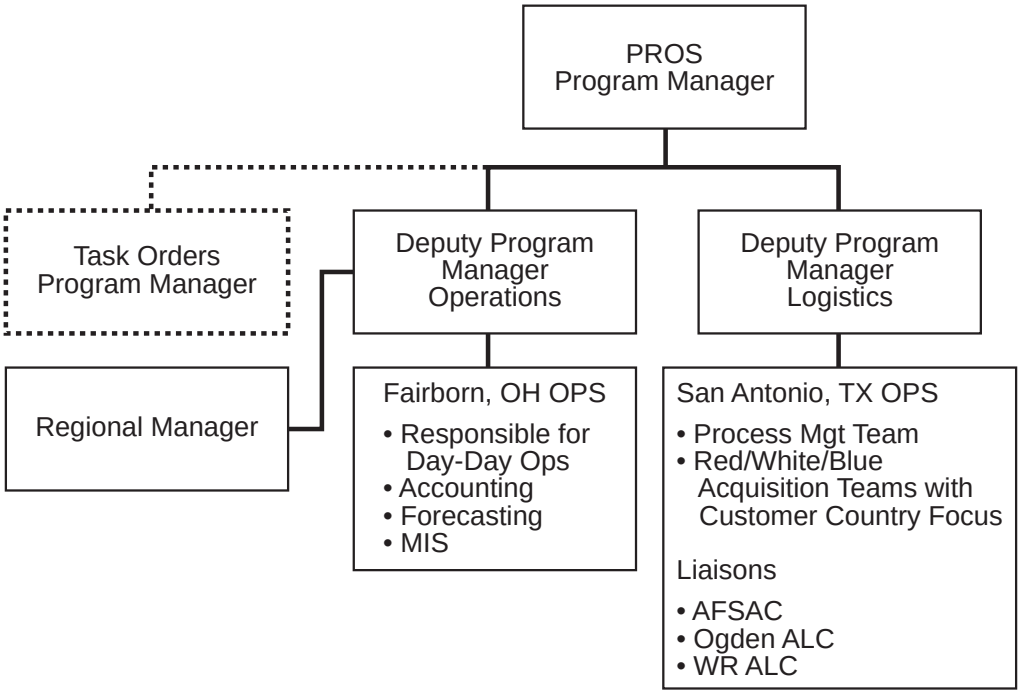
Quality is important to the FMS customer. Quality under the PROS II contract is measured using three important criteria:

- Cancellation rate;
- Validated Supply Discrepancy Report (SDR) rate, and;
- Billing Error Rate.

In June 2003 the Billing Error Rate was eliminated from the verifiable metrics due to the extremely low billing error rate and a new category was added to include the percentage of SDR responded to within fifty-five days.

There are two program management offices (PMOs) under the PROS II contract. The first is the AFSAC PMO which performs administrative and oversight functions and includes the program manager, deputy program manager, financial manager, logisticians, contracting, maintenance and management information systems support. On the contractor side, LSLI maintains two offices, one in Fairborn, Ohio which is responsible for accounting, management information system management, and marketing. In addition, the Fairborn office performs the function of an interface between the contractor, the PMO, FMS customers, and the San Antonio, Texas office. The heart of the operation is the procurement and logistic organization in San Antonio, Texas illustrated in Figure 2. The San Antonio operation is organized into cross functional teams who support requirements for specific customers. This specialization leads to improved customer support based on increased familiarity with the customer's requirements and the vendors who support those requirements. Acquisition team leads are responsible for the overall performance of their teams in support of specific country requirements for both supply/repair parts and maintenance/repair. This organizational structure benefits the FMS customer who has one specific focal point for questions concerning critical requirements or to make a routine inquiry on the status of a requisition. See Figure 3 on the next page.

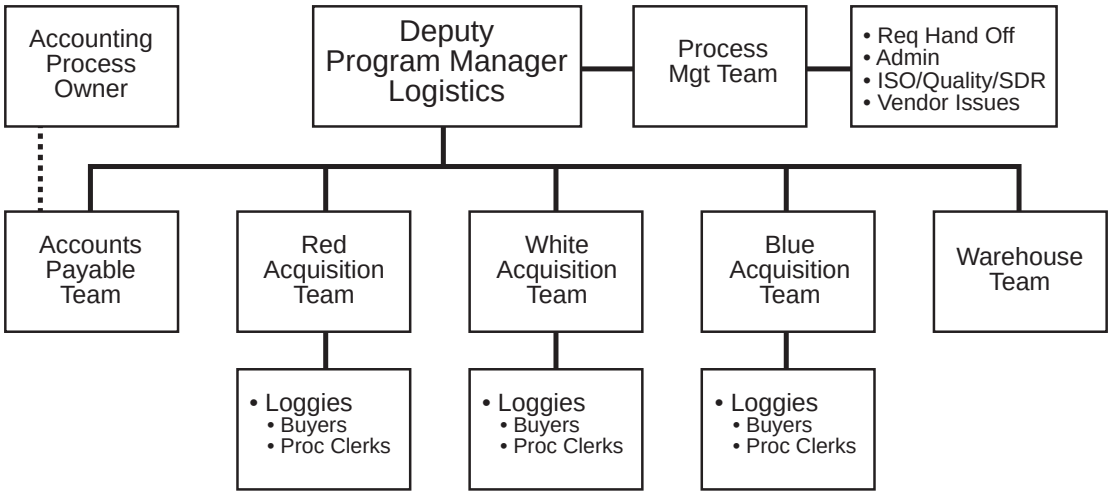
Figure 2. PROS II Organization Chart



The success of the program relies on LSLI's ability to process a significant volume of requisitions in a relatively short period of time to meet the requirements of the contract. How does LSLI accomplish this task? It all begins with the main computer system for processing logistics information for the Air Force Security Assistance Center, the Security Assistance Management Information System (SAMIS). SAMIS performs edits on all incoming requisitions and electronically passes the order to AFSAC Case financial managers who ensure adequate funds are available on the country case/line and in the correct account. All PROS II requisitions are direct cite. If the requisition passes all edits it is passed electronically to LSLI via a series of Electronic Data Interfaces (EDI). Once LSLI's data system receives the requisition, the clock starts on processing the requisition for ultimate delivery to the customer. An LSLI logistician

reviews the requisition and attempts to cross the part numbered requirement to a NSN. If the part number crosses to an NSN a message is sent back to AFSAC requesting approval to continue procurement on the requested item. If the item is DoD managed, the requisition is cancelled back to the AFSAC for routing to the appropriate activity for filling the requisition. If the item is a part numbered item that does not cross to an NSN or is a standard item and is no longer managed by DoD, the procurement action is initiated by LSLI.

Figure 3. PROS II San Antonio Organization Chart



Lear Siegler Logistics International developed an electronic bulletin board where qualified vendors and original equipment manufacturers (OEMs) can respond to requests for quote to fill the supply/repair requisition or perform the maintenance/repair action. As of the printing of this article, over 470 vendors have registered on the LSLI bulletin board. Some of the major OEMs do not use the bulletin board and prefer other means of solicitation. As a result, the total number of vendors and OEMs LSLI has in its database is over 750.

Why So Many Vendors?

The simple answer is competition. Adequate price competition is the government's gage for measuring the contractor's ability to achieve fair and reasonable prices. LSLI does not gain financially by increasing the prices on procurement actions. The fixed fill-fee(s) that LSLI earns are contractually mandated. The contractor does not receive additional fill fees until the price of the asset jumps from one wide price band to the next wide price band. These bands are wide enough to prevent the contractor from manipulating prices to earn additional fill fees. The interests of the contractor, and the FMS customers, are best served when LSLI achieves the lowest price the marketplace will offer for that supply or maintenance requisition, at that time, under the conditions required.

Task Order Management

As previously stated in this article, task orders are a means of providing studies, analysis and technical services for the FMS customer. But in actuality, it is much more. Task orders under the PROS II contract have ranged from very simple requirements such as conducting logistics management reviews, to very complex requirements, such as the establishment of an engine test facility in an FMS customer's country. Task orders have been successfully performed in support of F-16 Landing Gear Regeneration, in-country repairs for helicopter gearboxes, support equipment and cameras, night vision goggle helmet modifications, and night vision light compatibility development and kitproofing.

At the time of contract award, LSLI subcontracted with Northrop Grumman Information Technology (NGIT) in a true teaming fashion to perform all aspects of task order program management. One of the original goals of task order support was to provide the capability to resolve critical part shortages when parts are no longer available through the PROS II requisition process.

Task order execution is dependent on expedited task ordering procedures which are established in the PROS II contract. Task orders are designed to provide timely support, competitive pricing, quality service, quality program management and a realistic turn-around-time.

The task order process is relatively simple in its execution. The customer communicates the FMS task order requirement to the command country manager and the AFSAC PROS II program management office. LSLI/NGIT will conduct (optional) a pre-task order meeting with AFSAC and the customer country to further definitize the requirement. The AFSAC PROS II contracting officer will issue a Statement of Objectives (SOO) or Statement of Work (SOW) to LSLI/NGIT. Upon issuance of the SOW LSLI/NGIT has seven working days to prepare a technical implementation plan for accomplishing the task requirements. After submittal of the technical implementation plan and cost proposal, the AFSAC task order manager reviews and coordinates the technical implementation plan with the appropriate personnel and organizations and provides customer funding. The AFSAC PROS II contracting officer then issues a delivery order (DD1155) to LSLI. LSLI in turn issues a purchase order to NGIT who begins the execution phase of the task order in accordance with the SOW and the technical implementation plan.

Reality Versus Customer Expectations

Foreign military sales requirements for non-standard parts offer no opportunity for forecasting and only limited opportunities for consolidation. Therefore, purchasing or repairing parts through the PROS II contract is not the most efficient method of procurement for FMS logistic requirements, but it is the best method to support small, unconsolidated requirements.

Many OEMs, who developed and delivered weapon systems to the US government and FMS customers, are no longer interested in supporting small quantity purchases. Their manufacturing and business processes are structured to support large economic order quantities. A major manufacturing plant does not easily convert from large production runs to small production runs. This is very inefficient activity for OEMs. Smaller vendors, with smaller overheads, are better suited for small orders.

The PROS II contract has numerous terms and conditions that were put in place to ensure the contractor follows procurement practices that comply with statute, policy, regulation, and best practice that the AFSAC Foreign Liaison Officers (FLOs) agreed to prior to the release of Request for Proposal for the PROS II contract. These mandatory requirements are clearly defined in the contract. In order to monitor contractor performance the US government conducts contractor site surveillances twice a year. Purchase order files are reviewed, analyzed, and feedback is provided directly to LSLI at the end of each site visit.

Fair and Reasonable Pricing

There is not a single formula or equation that can be used to validate that a fair and reasonable price has been negotiated. It takes both buying experience and extensive knowledge of the marketplace to become an outstanding logistics support buyer. Competition in the marketplace is one of the most reliable methods of assuring a fair and reasonable price. Adequate price competition exists when two or more responsible, responsive, and independent offerors submit bids or proposals in response to a request for quote (RFQ) or request for proposal (RFP) to provide the material or service requested. The determination of a fair and reasonable price is not

based on a scientific or mathematical formula; it is more of an art than a science. When the competitive marketplace of the requirement is sole source or single source, the logistics buyer must make a determination of fair and reasonable pricing based on a comparison to previous purchases of the same item, or previous purchases of a similar item. This comparison may incorporate many factors to determine a fair and reasonable price. Some of the factors that might be considered are inflation, break in production, quantity differences, configuration changes, value analysis etc. Many elements of the determination of fair and reasonable pricings have both objective and subjective criteria.

We applaud the FMS customers who have conducted independent logistics research and who have been willing to provide vendor and pricing information to LSLI through the narrative portion of the requisition. No one can be expected to have perfect market information. The more the customer, the government, and the contractor team work together to support PROS FMS requirements, the more satisfied the FMS customers will be with the outcome lower prices and faster deliveries. Partnering and collaboration should not be unique to the US government and its prime contractors. The next hurdle of acquisition evolution that needs to be achieved is teaming between the FMS customer and the contractor. Only when partnership is realized will the most optimal outcome of contract performance be achieved.

The Future of PROS II

The current PROS II contract period of performance ends in December 2005. Starting in 2004, AFSAC will begin to develop the performance work statement for the follow-on Tri-Service contract for non-standard and hard to support supply and maintenance requisitions for FMS customers worldwide. Although there is some discussion as to what to name the follow on program, it is recognized that AFSAC and industry have jointly developed a robust means of providing support to the FMS customer. In the development of the PROS II contract, AFSAC envisioned the contract to be Tri-Service by the mid-term of the contract. Right now, the Army is tentatively scheduled to start inputting requisition in the fall of 2003, with the Navy to follow within six months after minor interface issues are resolved.

About the Authors

Patrick K. Hawkins is the Deputy Program Manager for Operations/Contracting Officer at Lear Siegler Logistics International, Fairborn, Ohio. He was the Deputy Director of Research, Associate Professor, Acquisition Functional Coordinator at the Defense Institute of Security Assistance Management from 1995 through 2001.

Christine L. Hazlett is the Chief of the Parts and Repair Ordering System Contracting Division and the Contracting Officer for the PROS II Program. She teaches contracting courses across the country for the National Contract Management Association.